L	Hits	Search Text	DB	Time stamp
Number 1	1044827	oxidative or oxidizing or non-oxidative	USPAT	2003/01/15
2	3	or non-oxidizing or oxygen or air ("6133491" or "5470384" or "5227026").pn.	USPAT	16:52 2003/01/15
3	3	(oxidative or oxidizing or non-oxidative or non-oxidizing or oxygen or air) and (("6133491" or "5470384" or "5227026").pn.)	USPAT	16:28 2003/01/15 16:42
4	3501	(pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near15 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)	USPAT	2003/01/15 16:53
5	904788	waste or tire or rubber or petroleum or polymer\$3 or PVC or pyrol\$3 or cracking	USPAT	2003/01/15
6	3004	((pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near15 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)) and (waste or tire or rubber or petroleum or polymer\$3 or PVC or pyrol\$3 or cracking)	USPAT	2003/01/15 16:50
7	40729	208/\$.ccls or 585/\$.ccls. or 202/\$.ccls. or 201/\$.ccls.	USPAT	2003/01/15 16:51
8	538	(((pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) nearl5 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)) and (waste or tire or rubber or petroleum or polymer\$3 or PVC or pyrol\$3 or cracking)) and (208/\$.ccls or 585/\$.ccls. or 202/\$.ccls. or 201/\$.ccls.)	USPAT	2003/01/15 16:51
9	448	585/240-242.ccls.	USPAT	2003/01/15
10	78 ,	((((pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near15 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or Vacuum)) and (waste or tire or rubber or petroleum or polymer\$3 or PVC or pyrol\$3 or cracking)) and (208/\$.ccls or 585/\$.ccls. or 202/\$.ccls. or 201/\$.ccls.)) and 585/240-242.ccls.	USPAT	2003/01/15 16:51
11	78	((pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near15 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)) and ((((pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near15 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)) and (waste or tire or rubber or petroleum or polymer\$3 or PVC or pyrol\$3 or cracking)) and (208/\$.ccls or 585/\$.ccls. or 202/\$.ccls. or 201/\$.ccls.)) and 585/240-242.ccls.)	USPAT	2003/01/15 16:53
	2885	(pyrolysis or pyrolyzer or ((cracking or cracked) near5 (thermal or thermally or steam)) or (coking near5 drum)) near9 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or vacuum)	USPAT	2003/01/15 16:54

Search History 1/15/03 5:30:08 PM Page 1

13	59	(((pyrolysis or pyrolyzer or ((cracking	USPAT	2003/01/15
		or cracked) near5 (thermal or thermally		17:06
		or steam)) or (coking near5 drum)) near15		
		(air or oxygen or oxidativ\$3 or		
		non-oxydativ\$4 or nonoxidativ\$3 or	,	
		vacuum)) and (((((pyrolysis or pyrolyzer		
		or ((cracking or cracked) near5 (thermal		
		or thermally or steam)) or (coking near5		
		drum)) near15 (air or oxygen or		
		oxidativ\$3 or non-oxydativ\$4 or		
		nonoxidativ\$3 or vacuum)) and (waste or		
		tire or rubber or petroleum or polymer\$3		İ
		or PVC or pyrol\$3 or cracking)) and (208/\$.cc1s or 585/\$.cc1s. or 202/\$.cc1s.		
		or 201/\$.ccls.)) and 585/240-242.ccls.))		
		and ((pyrolysis or pyrolyzer or		
		((cracking or cracked) near5 (thermal or		
		thermally or steam)) or (coking near5		
		drum)) near9 (air or oxygen or oxidativ\$3 or non-oxydativ\$4 or nonoxidativ\$3 or		
		vacuum))		
14	59710	oxygen-free or non-oxygen\$5 or	USPAT	2003/01/15
	33,10	nonoxidativ\$5 or non-oxidativ\$4 or	551111	17:10
		air-free or (air or oxygen) near4		
		(deficient or free or absence)		
15	29	((((pyrolysis or pyrolyzer or ((cracking	USPAT	2003/01/15
		or cracked) near5 (thermal or thermally		17:28
		or steam)) or (coking near5 drum)) near15		
		(air or oxygen or oxidativ\$3 or		
		non-oxydativ\$4 or nonoxidativ\$3 or		
		vacuum)) and (((((pyrolysis or pyrolyzer		
		or ((cracking or cracked) near5 (thermal		
		or thermally or steam)) or (coking near5		
		drum)) near15 (air or oxygen or		
		oxidativ\$3 or non-oxydativ\$4 or		
		nonoxidativ\$3 or vacuum)) and (waste or		
		tire or rubber or petroleum or polymer\$3	1	
	}	or PVC or pyrol\$3 or cracking)) and		
		(208/\$.ccls or 585/\$.ccls. or 202/\$.ccls.		
		or 201/\$.ccls.)) and 585/240-242.ccls.))		
		and ((pyrolysis or pyrolyzer or		
		((cracking or cracked) near5 (thermal or		
		thermally or steam)) or (coking near5		
		drum)) near9 (air or oxygen or oxidativ\$3		
		or non-oxydativ\$4 or nonoxidativ\$3 or		
		vacuum))) and (oxygen-free or		
		non-oxygen\$5 or nonoxidativ\$5 or		
		non-oxidativ\$4 or air-free or (air or		
		oxygen) near4 (deficient or free or		
1.6	4	absence))	HCDAE	2002/01/15
16	1	(("6133491" or "5470384" or	USPAT	2003/01/15
		"5227026").pn.) and (oxygen-free or		11:29
		non-oxygen\$5 or nonoxidativ\$5 or non-oxidativ\$4 or air-free or (air or		
		oxygen) near4 (deficient or free or absence))		
17	٠,	absence)) (("6133491" or "5470384" or	USPAT	2003/01/15
1/		"5227026").pn.) and ((pyrolysis or	USPAI	17:29
		pyrolyzer or ((cracking or cracked) near5		11.43
		(thermal or thermally or steam)) or		
		(coking near5 drum)) near9 (air or oxygen		
		or oxidativ\$3 or non-oxydativ\$4 or		
		nonoxidativ\$3 or vacuum))		
	l	TITLE THE GOLD TO SEE THE SECOND TO		

18	0 ((oxidative or oxidizing or non-oxidative	USPAT	2003/01/15
	or non-oxidizing or oxygen or air) and		17:29
	(("6133491" or "5470384" or		
	"5227026").pn.)) and ((pyrolysis or		
	pyrolyzer or ((cracking or cracked) near5		
	(thermal or thermally or steam)) or		
	(coking near5 drum)) near15 (air or		
	oxygen or oxidativ\$3 or non-oxydativ\$4 or		
	nonoxidativ\$3 or vacuum))		

```
L1
             271
BRS
                    desor$5 near10 waste
BRS
      L2
             135037
                           drum
      L3
BRS
             18883 extract$6 near10 (gas or vapor$5)
BRS
      L4
             1
                    1 and 2 and 3
BRS
      L5
             0
                    desor$5 near10 extrac$5 near10 drum$3
             2
BRS
      L6
                    desor$5 near20 extrac$5 near20 drum$3
BRS
      L7
             209
                    desor$5.ti.
BRS
      L8
             8714
                    waste.ti.
BRS
      L9
             0
                    7 and 8
                    (desorbtion or desorption).ti.
BRS
      L10
             151
      L11
BRS
             23
                    3 and 10
BRS
      L12
             787
                    gas adj extraction
BRS
      L13
                    11 and 12
             0
BRS
      L14
             0
                    7 and 12
BRS
      L15
             0
                    8 and 10
BRS
      L16
             787
                    3 and 12
BRS
      L17
                    10 and 16
             0
BRS
      L18
                    educt$3 near6 scrub$3
             18
BRS
      L19
             0
                    16 and 18
BRS
      L20
             0
                    7 and 18
BRS
      L21
             0
                    1 and 18
BRS
      L22
             3
                    2 and 18
      L24
             1410 (waste or material or solid or sludge) near12 (first adj temperature)
BRS
BRS
      L25
             647
                    24 near24 (second adj temperature)
BRS
      L26
             647
                    24 and 25
BRS
      L27
             0
                    12 and 26
BRS
      L28
             0
                    10 and 26
      L29
BRS
             0
                    6 and 26
BRS
      L31
             0
                    2 and 30
BRS
      L32
             0
                    1 and 30
BRS
      L33
             0
                    12 and 30
BRS
      L34
                    18 and 30
             0
BRS
      L35
                    12 and 30
BRS
      L36
             13643 desorbtion or desorption
BRS
      L37
                    30 and 36
             4
BRS
      L38
             4740
                    drum near10 seal$3
BRS
      L39
             0
                    37 and 38
BRS
      L40
                    30 and 38
             0
BRS
      L41
             3
                    26 and 38
BRS
      L42
             15
                    ejector near4 venturi near4 scrubber
BRS
      L43
             0
                    26 and 42
BRS
      L44
             0
                    24 and 42
BRS
      L45
                    18 and 42
             0
BRS
      L46
             0
                    1 and 42
BRS
     L47
             0
                    3 and 42
```

```
BRS
      L48
                    2 and 42
              4
BRS
      L49
              54715 (gas or vapor) near6 (entrained or particulate or particle)
      L51
                    18 and 42
BRS
              0
                    49 and 50
BRS
      L52
             24
BRS
                    3 and 52
      L53
              5
BRS
      L54
             0
                    36 and 53
BRS
      L55
             2
                    36 and 52
BRS
      L57
              8314
                    (separation or separated or separate or separating) near6 (particle or solid)
near6 (gas or gaseous or vapor)
BRS
      L58
              6
                    50 and 57
BRS
      L59
             24
                    25 and 57
BRS
      L60
             0
                    58 and 59
BRS
      L61
                    53 and 59
             0
BRS
      L62
             3160
                    drum near4 (sealed or sealing or seal or seals)
BRS
      L63
             0
                    59 and 62
                    53 and 62
BRS
      L64
             0
BRS
      L65
             0
                    50 and 62
BRS
      L66
             3
                    41 and 62
BRS
      L67
             49
                    drums near12 desor$5
BRS
      L68
             4
                    62 and 67
             80994 plunger
BRS
      L69
      L70
BRS
                    1 and 68
             0
BRS
      L71
                    68 and 69
             0
      L72
BRS
             1
                    1 and 69
BRS
      L73
             0
                    1 and 12
BRS
      L74
                    1 and "149"
             8
BRS
      L75
             58
                    1 and 49
BRS
      L76
             11
                    57 and 75
      L77
                    69 and 76
BRS
             0
BRS
      L78
             0
                    67 and 76
      L79
BRS
             0
                    16 and 75
BRS
      L80
                    62 and 76
             1
BRS
      L30
             17
                    3 and 26
BRS
      L81
             50
                    4 or 22 or 37 or 41 or 48 or 53 or 55 or 58 or 66 or 68 or 80 or 72 or 74
or 76
BRS
      L82
             117364
                           (two or three or four) near4 stage
      L83
BRS
             37778 multi-stage or multistage or (multi adj stage) or (multipl$4 adj stage)
BRS
      L84
             15396 82 and 83
BRS
      L85
              139746
                           82 or 83
BRS
      L86
             10
                    81 and 85
BRS
      L87
             4
                    67 and 81
BRS
      L88
             12
                    86 or 87
BRS
      L89
             4
                    62 and 88
      L90
BRS
             4
                    69 and 81
BRS
      L91
                    81 and 85
             10
```

```
BRS
      L94
            2
                   87 and 92
BRS
      L93
             8
                   92 not 87
BRS
      L95
             18
                   50 and 81
BRS
      L96
             544139
                         screw or conveyor
BRS
      L97
                   95 and 96
             5
BRS
      L98
             118507
                         208/$.ccls. or 585/$.ccls. or 202/$.ccls. or 201/$.ccls. or
196/$.ccls. or 422/$.ccls.
BRS
     L99
             11
                   81 and 98
      L92
                   91 not 90
BRS
             10
BRS
      L100 0
                   67 near12 85
BRS
      L101
           197
                   85 near20 desor$5
BRS
     L102 177
                   85 near10 desor$5
BRS
      L103 2
                   81 and 102
BRS
     L104 24
                   81 and (hydrocarbon or gasoline)
BRS
     L105 0
                   103 and 104
      L106 7
                   85 and 104
BRS
BRS
      L107 862
                   non-oxidative
BRS
     L108 0
                   106 and 107
BRS
     L109 0
                   81 and 107
BRS
     L110 198
                   ((multiple or 2-stage or 3-stage or 4-stage or multi-stage or
(two or three or four) adj stage)) near5 desor$5
BRS
      L111
           2
                   81 and 110
BRS
      L112 2
                   67 and 110
BRS
     L113 197
                   101 or 102
     L114 100
BRS
                   110 and 113
BRS
     L115 0
                   107 and 114
     L116 19552 (first or second) near4 drum
BRS
BRS
      L117 0
                   114 and 116
      L118 0
BRS
                   110 and 116
BRS
     L119 1252
                   85 and 116
      L120 0
BRS
                   12 and 119
BRS
      L121 0
                   67 and 119
BRS
     L122 91
                   62 and 119
      L123 0
BRS
                   113 and 122
BRS
     L124 0
                   110 and 122
     L125 0
BRS
                   107 and 122
      L126
BRS
            16
                   49 and 122
BRS
      L127
            90
                   98 and 119
BRS
      L128 0
                   104 and 127
BRS
     L129 90
                   85 and 127
BRS
     L130 0
                   104 and 129
BRS
                   129 and (hydrocarbon or gasoline)
      L131 62
BRS
      L132
           13
                   3 and 131
BRS
      L133
                   116 and 132
            13
BRS
      L134 0
                   26 and 133
```

```
L135 0
                   26 and 131
BRS
     L136 1
BRS
                   26 and 110
BRS
     L137 8
                   67 and 85 and 98
BRS
      L50
                   18 or 42
            33
BRS
     L138 0
                   26 and 137
BRS
     L139 697
                   (volatiliz$6 or vaporiz$6 or gasif$6) near12 drum
BRS
     L140 2
                   26 and 139
     L141 0
BRS
                   50 and 139
BRS
     L142 152
                   98 and 139
BRS
     L144 0
                   81 and 143
BRS
     L145 0
                   1 and 143
BRS
     L143 24
                   3 and 142
BRS L146 48963 (destruct$5 near6 distillat$6) or (thermal$ near5 decompos$) or pyrol$5
BRS
     L147 5
                   143 and 146
BRS
     L148 38709 rotary and (retort or kiln or drum)
BRS
     L149 17
                   1 and 148
     L150 5
BRS
                   139 and 149
BRS
     L151 5
                   1 and 150
BRS L152 31
                   ("4306961" or "5269906" or "4990237" or "4412909" or "4280879" or
"4139462" or "4306283" or "4276301" or "4738206" or "4778606" or "5245570" or "5417492"
or "5292429" or "5250175" or "5178007" or "5078836" or "4872954" or "5523060" or
"4695448" or "6290916" or "5656178" or "5464468" or "4977839" or "5704557" or "6112675"
or "5728361" or "6139806" or "5382002" or "5227026" or "5381361" or "5961870").pn.
BRS
     L153 10
                   139 and 152
BRS
      L154 7
                   57 and 153
BRS
     L155 4
                   116 and 154
BRS
     L156 0
                   85 and 155
BRS
     L157 0
                   82 and 155
BRS
     L158 1
                   82 and 153
BRS L159 6
                   3 and 152
BRS
      L160 1898
                   first adj drum
BRS
      L161 2
                   152 and 160
```

```
L1
BRS
                    (2-stage or 3-stage or 4-stage or multi-stage) adj desor$5
                                                                          USPAT
             0
      2002/06/11 21:25
BRS
     L2
                    (two-stage or three-stage or four-stage or multistage) adj desor$5
             10
USPAT
             2002/06/11 21:28
             152706
BRS L3
                           waste USPAT
                                               2002/06/11 21:29
BRS
      L4
                    2 and 3
                                 USPAT
                                               2002/06/11 21:29
BRS
      L5
             20135 (two or three or four or mulriple or multiplicity or first or second) near2
drum USPAT
                    2002/06/11 21:34
BRS
      L6
                    multiple near2 drum USPAT
                                                      2002/06/11 21:35
             863
BRS
      L7
             20567 5 or 6 USPAT
                                        2002/06/11 21:35
      L8
             2221 3 and 7
BRS
                                 USPAT
                                               2002/06/11 21:35
     L9
BRS
             45604 pyrol$3 or (solid near3 waste) or ((recover$4 or produc$3) near4
                           2002/06/11 21:38
hydrocarbon) USPAT
BRS
             481
                    7 and 9
      L10
                                 USPAT
                                               2002/06/11 21:38
BRS
      L11
             1902 first adj drum USPAT
                                               2002/06/11 21:39
BRS
      L12
             13189 first near3 drum
                                        USPAT
                                                      2002/06/11 21:39
BRS
      L13
             56
                    10 and 11
                                 USPAT
                                               2002/06/11 21:39
BRS
      L14
             241
                    10 and 12
                                 USPAT
                                               2002/06/11 21:40
BRS
     L16
             120790
                           (gas or vapor or gaseous) near5 (recovered or recover or
recovering or exit or exits or exited or product or products or collect or collected or leaving or
leaves or effluent)
                    USPAT
                                 2002/06/11 21:48
     L17
                    14 and 16
BRS
             120
                                 USPAT
                                               2002/06/11 21:48
                           208/$.ccls. or 110/$.ccls. or 48/$.ccls. or 201/$.ccls. or 202/$.ccls.
BRS
     L18
             152708
or 422/$.ccls. or 585/$.ccls. USPAT
                                        2002/06/11 21:49
BRS
      L19
             64
                                 USPAT
                    17 and 18
                                               2002/06/11 21:57
BRS
      L20
             372788
                           seling or seled or seal USPAT
                                                            2002/06/11 21:58
BRS
      L21
             309665
                           sealing USPAT
                                               2002/06/11 21:58
BRS
      L22
             341906
                           sealed USPAT
                                               2002/06/11 21:58
BRS
      L23
             603146
                           20 or 21 or 22
                                               USPAT
                                                            2002/06/11 21:59
BRS
      L24
                    19 and 23
                                 USPAT
                                               2002/06/11 22:20
             15
BRS
      L25
             1987
                    second adj drum
                                        USPAT
                                                      2002/06/11 22:21
BRS
      L26
                    24 and 25
             4
                                 USPAT
                                               2002/06/11 22:49
      L27
                    19 and 25
                                 USPAT
BRS
             15
                                               2002/06/11 22:30
      L28
                    27 not 26
BRS
             11
                                 USPAT
                                               2002/06/11 22:30
BRS
      L29
             1
                    5170726.pn. USPAT
                                               2002/06/11 22:49
```

Art Unit: 1764

BRS L1 41854 (first) near2 temperature

BRS L2 35324 second near2 temperature

BRS L3 21345 1 and 2

BRS L4 19137 desor\$5

BRS L5 586 3 and 4

BRS L6 169668 (gas or vapor or vapour or gaseous) near5 (overhead or produc\$4

or hydrocarbon)

BRS L7 310 6 and 5

BRS L8 692 second near3 (desor\$4)

BRS L9 65 7 and 8

BRS L10 443 585/240-242.ccls.

BRS L11 20 3 and 10

BRS L12 0 4 and 11

BRS L13 0 9 and 10

BRS L14 291 desorbtion

BRS L15 13499 desorption

BRS L16 13674 14 or 15

BRS L17 6 10 and 16

BRS L18 229802 melting

BRS L19 70889 cracking

Art Unit: 1764

BRS	L20	15017	18 and 1	19

BRS L31 1020 (two-stage or 2-stage or multi-stage or multistage or 3-stage three-stage or

second) near3 desor\$5

Art Unit: 1764

BRS 1	L39	0	10	and	3	3
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BRS L40 0 10 and 31

BRS L41 0 5 and 10

BRS L42 8 4 and 10